INVESTIGATION OF INFORMATION SOURCES AND COMMUNICATION CHANNELS IN IPM RICE FARMING IN FARS PROVINCE, IRAN

MAHNOOSH SHARIFI*, ABOULGHASEM SHARIFZADEH**, MORTEZA AKBARI*, AND SEYYED MAHMOUD HASHEMI*

*Department of Agricultural Extension and Education, College of Agricultural Economics and Development, the University of Tehran, and
**Gorgan University of Agriculture and Natural Resources Sciences, Iran
Corresponding author’s Email: m62akbar@gmail.com

ABSTRACT

Extension of integrated pest management (IPM) as a component of sustainable agricultural development, involves empowering farmers. Facilitating the information accessibility of farmer groups seems as empowerment strategy. This strategy is based on identification of related patterns, including information sources and communication channels of farmer groups. Along with this comment, a study was carried out through a survey research design for data collection to study the effects of information sources and communication channels in rice IPM. The statistical population of the study consisted all of rice growers in Marvdasht county, Fars province in Iran. Sample size included 90 farmers determined by Cochran's formula. Proportional random sampling technique was used to select farmers. A questionnaire was compiled to collect data. The results showed that out of studied information sources and communication channels, in order of importance, neighbors, agricultural inputs providers including pesticides dealers and to visit the farms that applied IPM obtained high priorities. Also results showed that there were significant relationships among age, rice farming land area, farming experience, yield, participation in extension programs, access level to pesticides, need feeling to pesticides, tendency level to decrease pesticide use, possibility of pests control naturally, and information sources and communications channels in IPM. Furthermore the results of multiple regression revealed that variables such as, rice cultivation land area, farmer participations in extension programs, and tendency level of farmers to decrease pesticide use and possibility of pests control naturally explained 70 percent of variance of applying rice IPM as dependence variable.

Key words: Integrated pest management (IPM), Information Sources, Communication channels

INTRODUCTION

Rice is a staple food for a large part of the world's human population, especially in East, South and Southeast Asia, making it the most consumed cereal grain (Export Trading Co. Ltd, 2008). This crop provides more than one fifth of the calories consumed worldwide by humans (Smith, 1998). Although its species are native to South Asia and certain parts of Africa, centuries of trade and exportation have made it commonplace in many cultures, including Iran. This crop is grown by small landholders, under management practices that range from low-input rain fed crops grown once a year to high-input irrigated crops that are grown twice or even thrice a year. Sales of rice from throughout the prolonged harvest season provide farmers with valuable cash income.

Although reducing crop losses due to pests is essential to increase food security, poverty reduction and sustainable agricultural development (Van Huis & Meerman, 1997; Oerke, 1994), and pesticides play a major role in pest management in agriculture. However excessive use of pesticides can threaten food and user's safety, the environment and increasingly the export of agricultural products to global markets. Globally, pesticide sales have soared since